

Date: January 20, 2017
To: Lynne Liddington
From: Lance Allen
Subject: Amendment/Third Quarter 2016/TDEC Audit
Site: Air Lab 470931013

On September 13, 2016, personnel from the Quality Assurance section conducted performance audits on selected ambient air monitors. The following is a summary of the parameters and values measured.

Site & Instrument 47-093-1013	Parameter & Method	Audit Point	Monitor Response	Difference	Acceptable Range
Air Lab 470931013 Teom 1405 serial # 20953	Current Time	13:53:14 est	13:53:00 est	-14 sec	±5 min
	Ambient Temp.	31.6°C	31.4°C	-0.2°C	±2°C
	Bar. Press.	741 mm	736 mm	-5 mm	±10mm
	Main Flow	3.20 lpm	3.00 lpm	-6.3%	±10%
	By Pass Flow	14.09 lpm	13.65 lpm	-3.1%	±10%
	Total Flow	17.34 lpm	16.65 lpm	-4.0%	±10%

Remarks:

1. The monitor audited showed satisfactory correlation with our audit standards.
2. The previous audit results were reported with the acceptable ranges established for the TEOM 1400a. The QA handbook has established specific criteria for the TEOM 1400a sampling for PM 2.5 but not for PM 10. Since the EPA has not established specific criteria for the TEOM 1405 unit, the criteria presented in the unit's manual will take precedence. The manual states in Section 5 page 5-36 "Note. If the difference is more than 10 percent, the flow will fail the audit and the unit requires a leak check/flow calibration". Until the EPA sets specific criteria for the 1405, the QA Section will establish acceptable ranges for flow checks from the unit's manual.

Recommendations:

1. None.

If we can be of any further assistance or should there be questions regarding this audit, please email or call.

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KX091316P-Amendment

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* Streamline Pro (S#M060504), and web site www.time.gov were used by Quality Assurance personal to conduct this audit.